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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,346	03/06/2003	Joanne Elizabeth Burn	50341-041	3207

7590 01/04/2006

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600 13th Street NW  
Washington, DC 20005-3096

EXAMINER
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BAUM, STUART F

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/857,346

Applicant(s)

BURN ET AL.

Examiner

Stuart F. Baum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

The previous restrictions dated 10/12/2005 and 12/1/2005 have hereby been vacated in favor of this restriction.

#### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-3, 6-9, 12, and 14-16, drawn to an isolated nucleic acid molecule comprising a MADS box, or wherein said nucleic acid comprises a nucleotide sequence corresponding to a FLOWERING LOCUS F (FLF) gene, a vector comprising said nucleic acid, or a plant transformed with said nucleic acid, or a method of delaying flowering in a plant comprising over-expressing the protein encoded by said nucleic acid molecule.

Group II, claim(s) 4-5, 7-9, 13, and 15-16 drawn to an isolated nucleic acid molecule of claims 1 or 2, which is capable of accelerating the flowering of a plant due to co-suppression, or wherein the nucleic acid molecule is in antisense orientation; vector, plant cell or plant comprising said nucleic acid molecule in antisense orientation, or a method of inducing early flowering in a plant or method of modifying the response of a plant to vernalisation comprising inhibiting the expression of said nucleic acid molecule in a plant.

Group III, claim(s) 6, drawn to a PCR primer.

Group IV, claims 10-11, drawn to a method of isolating a nucleic acid molecule capable of altering the flowering time of a target plant.

Group V, claim(s) 17-18, drawn to a polypeptide.

Group VI, claim(s) 19-22, drawn to an antibody and method of using said antibody.

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Claim 6 is generic to Groups I and III and will be examined to the extent that it is drawn to the elected invention.

Claims 15 and 16 are generic to Groups I and II and will be examined to the extent that they are drawn to the elected invention.

**If Applicants elect any one of Groups I, II, or IV, Applicants are also to elect one DNA sequence from the list in claim 1.**

**If Applicants elect any one of Groups V or VI, Applicants are also to elect one nucleic acid sequence that encodes a protein from the list in claim 1.**

2. The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: isolated nucleic acid molecule comprising a MADS box, which is capable of altering the flowering time of a plant is taught in the prior art. An (April 1996, WO 96/11566) teach a nucleic acid encoding a OsMADS1 protein that comprises a MADS box and is capable of altering the flowering time of a plant into which it is introduced (pages 19-22, Example 1; pages 22-27, Examples 2-3).

3. In addition, the claims are not linked by a single technical feature because they are each drawn to products and processes not shared by the other. The isolated nucleic acid of Group I is not shared by the antisense nucleic acid of Group II, or shared by the primer of Group III, which is not shared by the method of Group IV, which is not shared by the polypeptide or antibody of Groups V or VI.

4. Each of Inventions I-VI are capable of being separately made, independently used and the patentability of one does not render the others obvious or unpatentable.

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5. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by the literature and sequence searches required for each of the Inventions are not required for another of the Inventions, restriction for examination purposes as indicated is proper.

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

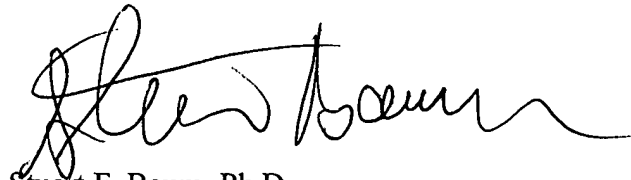
7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 571-272-0792. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached at 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

A handwritten signature in black ink, appearing to read "Stuart F. Baum". The signature is fluid and cursive, with a large initial "S" and "B".

Stuart F. Baum Ph.D.

Patent Examiner

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January 3, 2006